Complete Summary

GUIDELINE TITLE

Acute pharyngitis in children.

BIBLIOGRAPHIC SOURCE(S)

Michigan Quality Improvement Consortium. Acute pharyngitis in children. Southfield (MI): Michigan Quality Improvement Consortium; 2007 Jan. 1 p.

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Michigan Quality Improvement Consortium. Acute pharyngitis in children. Southfield (MI): Michigan Quality Improvement Consortium; 2004 Apr. 1 p

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Acute pharyngitis, including group A beta hemolytic Streptococcus (GABHS) infection

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Risk Assessment
Treatment

CLINICAL SPECIALTY

Family Practice
Internal Medicine
Otolaryngology
Pediatrics

INTENDED USERS

Advanced Practice Nurses
Health Plans
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

- To achieve significant, measurable improvements in the assessment, diagnosis, and treatment of acute pharyngitis through the development and implementation of common evidence-based clinical practice guidelines
- To design concise guidelines that are focused on key management components of acute pharyngitis to improve outcomes

TARGET POPULATION

High-risk and not high-risk children and adolescents 2 to 18 years of age

INTERVENTIONS AND PRACTICES CONSIDERED

Assessment/Diagnosis

1. Assessment of past history of rheumatic fever or household contact with a history of rheumatic fever
2. Assessment of the likelihood of strep pharyngitis
3. Throat culture (TC) or Rapid Screen test

Management/Treatment

1. Throat culture or Rapid Screen negative: symptomatic treatment, avoid antibiotics
2. Strep pharyngitis:
    - Penicillin VK
    - Amoxicillin
    - Benzathine penicillin G
    - Erythromycin ethyl succinate if penicillin allergic
    - Alternative treatment: cephalexin
3. Re-evaluation and referral to otolaryngologist, if necessary

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The Michigan Quality Improvement Consortium (MQIC) project leader conducts a search of current literature in support of the guideline topic. Computer database searches are used to identify published studies and existing protocols and/or clinical practice guidelines on the selected topic. A database such as MEDLINE and two to three other databases are used.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence for the Most Significant Recommendations

A. Randomized controlled trials
B. Controlled trials, no randomization
C. Observational studies
D. Opinion of expert panel

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Using the health plan guideline summaries and information obtained from the literature search, the Michigan Quality Improvement Consortium (MQIC) director

and/or project leader prepare a draft guideline for review by the MQIC Medical Directors.

The draft guideline and health plan guideline summaries are distributed to the MQIC Medical Directors for review and discussion at their next committee meeting.

The review/revision cycle may be conducted over several meetings before consensus is reached. Each version of the draft guideline is distributed to the MQIC Medical Directors, Measurement, and Implementation Committee members for review and comments. All feedback received is distributed to the entire membership.

Once the MQIC Medical Directors achieve consensus on the draft guideline, it is considered approved for external distribution to practitioners with review and comments requested.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Once the Michigan Quality Improvement Consortium (MQIC) Medical Directors achieve consensus on the draft guideline, it is considered approved for external distribution to practitioners with review and comments requested.

The MQIC director also forwards the approved guideline draft to presidents of the appropriate state medical specialty societies for their input. All feedback received from external reviews is presented for discussion at the next MQIC Medical Directors Committee meeting. In addition, physicians are invited to attend the committee meeting to present their comments.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The level of evidence grades (A-D) are provided for the most significant recommendations and are defined at the end of the "Major Recommendations" field.

Assessment

Assess past history of rheumatic fever (especially carditis or valvular disease) or household contact with a history of rheumatic fever to identify high-risk patients.

Assess the likelihood of strep pharyngitis using the following items:

- Sudden onset
- Sore throat
- Fever
- Patchy discrete exudate
- Headache
- Nausea, vomiting, and abdominal pain
- Inflammation of pharynx and tonsils
- Tender, enlarged anterior cervical nodes
- Patient aged 5–15 years
- Presentation in winter or early spring
- History of exposure

Diagnosis

Not High-Risk Patients

Probability of group A beta hemolytic streptococci (GABHS): Low
Testing: None
Treatment: Symptomatic treatment only. **Avoid antibiotics**.

Probability of GABHS: Intermediate or High
Testing: Throat Culture (TC) **OR** Rapid Screen
Treatment: If TC is positive, use antibiotics.
If TC is negative, use symptomatic treatment only. **Avoid antibiotics**.
If treatment is started and culture result is negative, stop antibiotics.
If Rapid Screen is positive, use antibiotics.
If Rapid Screen is negative, culture[1] and only use antibiotics if throat culture is positive.

[1]Culture optional for age 16 and over

High Risk Patients (history of rheumatic fever or household contact)

Start antibiotics immediately. If throat culture is obtained and is negative, stop antibiotics.

Treatment

Preferred Treatment for Strep Pharyngitis

1. Penicillin VK: 250–500 mg twice or three times daily (bid-tid) x 10 days
2. Amoxicillin: 20–40 mg/kg/day divided tid x 10 days **[A]**
3. Benzathine penicillin G intramuscularly (IM) x 1: 600,000 units for weight < 60 lbs; 1.2 million units for weight > 60 lbs

4. If allergic to penicillin: erythromycin ethyl succinate: 40 mg/kg/day two-four times daily (bid-qid) (max 1 g/day) x 10 days
5. With oral antibiotics, a full 10 day course is required

Alternative Treatment for Strep Pharyngitis

6. Cephalexin 15 to 50 mg/kg/day divided bid or tid x 10 days

Re-Evaluate/Referral

1. If failure to respond clinically after 48 hours of treatment, rule out peritonsillar or retropharyngeal abscess. If present, prompt otolaryngology (ENT) evaluation is recommended.
2. Assess the potential for a compliance problem.

Definitions:

Levels of Evidence for the Most Significant Recommendation

A. Randomized controlled trials
B. Controlled trials, no randomization
C. Observational studies
D. Opinion of expert panel

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence is provided for the most significant recommendations (see "Major Recommendations" field).

This guideline is based on several sources including, the *ICSI Acute Pharyngitis Guideline*, Institute for Clinical Systems Improvement, 2005 (www.icsi.org).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Through a collaborative approach to developing and implementing common clinical practice guidelines and performance measures for assessment, diagnosis, and treatment of acute pharyngitis in children, Michigan health plans will achieve consistent delivery of evidence-based services and better health outcomes. This approach also will augment the practice environment for physicians by reducing the administrative burdens imposed by compliance with diverse health plan guidelines and associated requirements.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

This guideline lists core management steps. Individual patient considerations and advances in medical science may supersede or modify these recommendations.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

When consensus is reached on a final version of the guideline, a statewide mailing of the approved guideline is completed. The guideline is distributed to physicians in the following medical specialties:

- Family Practice
- General Practice
- Internal Medicine
- Other Specialists for which the guideline is applicable (e.g., endocrinologists, allergists, pediatricians, cardiologists)

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

This guideline is based on several sources including, the *ICSI Acute Pharyngitis Guideline*, Institute for Clinical Systems Improvement, 2005 (www.icsi.org).

DATE RELEASED

2004 Apr (revised 2007 Jan)

GUIDELINE DEVELOPER(S)

Michigan Quality Improvement Consortium - Professional Association

SOURCE(S) OF FUNDING

Michigan Quality Improvement Consortium

GUIDELINE COMMITTEE

Michigan Quality Improvement Consortium Medical Director's Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Physician representatives from participating Michigan Quality Improvement Consortium health plans, Michigan State Medical Society, Michigan Osteopathic Association, Michigan Association of Health Plans, Michigan Department of Community Health, and Michigan Peer Review Organization

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Michigan Quality Improvement Consortium Web site.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on November 28, 2005. The updated information was verified by the guideline developer on December 19, 2005. This NGC summary was updated by ECRI on October 16, 2006. The updated information was verified by the guideline developer on November 3, 2006. This NGC summary was updated by ECRI Institute on July 11, 2007. The updated information was verified by the guideline developer on July 16, 2007.

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